

CLAIM AMENDMENTS

1. (Currently amended) An encapsulation device for the repair of an articular cartilage defect, the device comprising:

a body for disposition adjacent a bone in an area of the cartilage defect;

an elongated leg structure extending from said body for disposition in the bone in the area of the cartilage defect, said leg structure having a length which is a plurality of magnitudes greater than a thickness of said body, and being of a generally conical configuration;

said body comprising a peripheral frame portion and ~~a~~ an integral cover portion disposed within said frame portion and bowed proximally to provide a bowed proximal end profile for engagement by a complementary-shaped tool head; and

said leg structure comprising a plurality of elongated leg members extending from a distal side of said frame portion;

each of said leg members being provided with a central channel therein, each of the channels opening on a proximal side of said frame member and extending to a point removed from a distal end of said leg member;

wherein at least one of said leg members is provided at a distal end thereof with an end portion enlarged beyond a periphery of said leg member at a proximal end of the end portion and a generally ~~pointed~~ crested end portion at a distal end of the end portion.

2. (Canceled)

3. (Currently Amended) The device in accordance with claim 1 wherein each of said leg structure is provided with member end portions comprise circumferential protrusions thereon for gripping the bone.

4. (Canceled)

5. (Withdrawn) The device in accordance with claim 1 wherein said body comprises a mesh portion.

6. (Withdrawn) The device in accordance with claim 1 wherein said body comprises a collagen scaffold.

7. (Withdrawn) The device in accordance with claim 1 wherein said body comprises a frame member and a sheet of periosteum fixed thereto.

8. (Withdrawn) The device in accordance with claim 1 and further comprising sutures affixing said cover portion to said frame.

9. (Currently amended) The device in accordance with claim 1 wherein a said peripheral frame bounds said cover portion.

10. (Canceled)

11. (Withdrawn) The device in accordance with claim 1 wherein said body portion comprises a frame for supporting a selected further body member, and said leg structure comprises a

plurality of leg members extending distally from said frame.

12. (Previously presented) The device in accordance with claim 1 wherein said body comprises a shell member and reinforcing struts fixed to said shell member and extending radially from a center of said shell member.

13. - 15. (Canceled)

16. (Original) The encapsulation device in accordance with claim 1 wherein the device is of a selected one of (i) bioabsorbable material and (ii) bioremodelable material.

17. (Original) The encapsulation device in accordance with claim 1 wherein the device is impregnated with cell growth material.

18. (Withdrawn) A system for effecting articular cartilage defect repair, the system comprising:

an encapsulation device comprising a body for disposition adjacent a bone in an area of the cartilage defect, and elongated leg structure extending from a distal surface of said body for disposition in the bone in the area of the cartilage defect, each leg of said leg structure being provided with a central opening therein extending from a proximal surface of said body;

a pilot hole device comprising a head portion, at least one elongated foot extending distally from said head portion, and a handle portion extending proximally from said head portion, said pilot hole device elongated foot being adapted to form a hole in the bone to receive a leg member of said leg structure; and

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an insertion tool comprising a head portion, at least one elongated foot extending from a distal end of said head portion, each elongated foot of said insertion tool head portion being adapted to be received by the central opening of one of the encapsulation device legs, and the insertion tool head portion is adapted to engage a proximal surface of said encapsulation device;

wherein said encapsulation device is adapted to be mounted on said insertion tool, said pilot hole device is adapted to form at least one hole in the bone, and said insertion tool may be manipulated to drive said encapsulation device leg structure into at least one hole in the bone, to place the encapsulation device distal surface adjacent the bone and in an area of the cartilage defect.

19. (Withdrawn) A tool for in-bone placement of an encapsulation device for the repair of an articular cartilage defect, the encapsulation device comprising a body portion and a cannulated leg extending distally from a center of a distal surface of the body portion, the tool comprising:

a head portion having a distal surface configured generally complementary to a proximal surface of the encapsulation device;

a handle portion extending proximally from said head portion;

the head portion and handle portion forming a bore extending axially of the head portion and handle portion; and

an insertion spike extending through the bore and adapted to extend through the encapsulation device leg, with a pointed distal end of the spike extending distally from a distal end of the encapsulation device leg;

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wherein the insertion spike is adapted to form a hole in the bone and the tool is adapted to push the encapsulation device leg into the hole and the encapsulation device body into adjacency with the bone.

20. (Currently amended) A method for effecting a repair to an articular cartilage defect, the method comprising the steps of:

providing an encapsulation device comprising a body for disposition adjacent a bone in an area of the cartilage defect, and an elongated leg structure extending from the body for disposition in the bone in the area of the cartilage defect, ~~said~~ the elongated leg structure comprising at least one leg, provided with a central channel therein, the channel being open on a proximal side of the frame member and being closed at the distal end thereof;

the body comprising a peripheral circular frame portion and a cover portion fixed within the frame portion and bound proximally therefrom to provide a bowed proximal surface, such that a central portion of the cover portion extends proximally further than a peripheral portion of the cover portion.

producing an elongated hole in the bone for each leg of the encapsulation device leg structure; and

driving each leg of the leg structure of the encapsulation device into the hole provided therefore in the bone to bring a distal surface of the encapsulation device body into adjacency with the bone.